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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

TANG, SON M

ART UNIT	PAPER NUMBER
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2632

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/647,003

Applicant(s)

MURATA, MASAMI

Examiner

Son M Tang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/9/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Dalen et al. [US 5,183,056].

Regarding to claim 1: Dalen et al. disclose a movement detection sensor comprising:

- a void formed by a partition wall define as between (5a,5b and 8a, 8b) of Fig. 1-2, and made of a non-magnetic material (cited in col. 10, lines 60,
- a magnetized rolling member 3 sealed in an interior of the void [see Fig. 3, 6 and 9];
- a magnetic sensor (4) provided in the partition wall [see Fig. 1].

Regarding to claim 2: Dalen et al. disclose the void is formed in spherical and the rolling member 3 is a sphere [see Fig. 1].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dalen et al. [US 5,183,056].

Regarding to claim 4: Dalen et al. disclose a movement detection sensor comprising:

- a void formed by a partition wall define as between (5a,5b and 8a, 8b) of Fig. 1-2, and made of a non-magnetic material (cited in col. 10, lines 60,
- a magnetized rolling member 3 sealed in an interior of the void [see Fig. 3, 6 and 9];
- a magnetic sensor (4) provided in the partition wall [see Fig. 1]. Delan et al. disclose that the housing parts 5a, 5ab can be simply manufactured as injection molded parts [col. 4, lines 20-22], except for specifically stating that the injection molded parts is a visco-elastic. Since it is being injected into the chamber for molding the surface of the chamber, one having ordinary skill in the art would have found it obvious to use soft material such as visco-elastic or plastic, in order to inject into the chamber.

5. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalen et al. in view of Guthrie et al. [US 5,844,482].

Regarding to claim 3: Dalen et al. disclose all the limitation in claim 1 above, except for an amplifying circuit that amplifies an output signal of the magnetic sensor and transmitter for transmitting the amplified signal, Guthire et al. teach a tracking object movement comprises a motion sensor 18, amplifier 24 and transmits the output signal via radio-transmits antenna 12 [as shown in Fig. 2, col. 4, lines 1-14, 30-33]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to use an amplifier to

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amplifying output signal prior to transmit as taught by Guthire et al. into the system of Dalen et al. so the detected signal can be clearly identified by the receiver at the remote location.

Regarding to claim 5: Dalen et al. disclose all the limitation in claim 4 above, except for specifically stating that a differentiating circuit the differentiates an output signal of the magnetic sensor in the movement detection sensor. It is known in the art that, the movement of the magnet member 3 relative to the coil 4 occur the differentiation of a magnetic field and as a result an electrical voltage is induced in the latter, indicating the occurrence of a motion, thus, it is obvious of one having ordinary skill in the art to recognize that, the differentiating circuit is included in the system to differentiates an output signal of the magnetic sensor.

Dalen et al. fail to specify that an amplifying circuit that amplifies an output signal of the magnetic sensor and transmitter for transmitting the amplified signal, Guthire et al. teach a tracking object movement comprises a motion sensor 18, amplifier 24 and transmits the output signal via radio-transmits antenna 12 [as shown in Fig. 2, col. 4, lines 1-14, 30-33]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to use an amplifier to amplifying output signal prior to transmit as taught by Guthire et al. into the system of Dalen et al. so the detected signal can be clearly identified by the receiver at the remote location.

6. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalen et al. in view of Guthrie et al. and further in view of Chalmers et al. [US 5,408,214].

Regarding to claims 6-7: Dalen et al. and Guthrie et al. made obvious of claims 3 and 5 above, Guthrie et al. further teach a microcomputer 20, stores (receives) and judges a detection

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signal [as shown in Fig. 2], however, they fail to specify that the detection signal amplified in the amplifying circuit before it received by the microcomputer. It is known in the art that detection signal can be amplified either before or after the alarm determination processor, Chalmers et al. teach an impact sensor 33, wherein the detection signal is being amplified before detected by the alarm generating circuit [as cited in col. 8, lines 56-65]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to amplify the detection signal prior to determine an alarm as taught by Chalmers et al. into the system of combination above, for the benefit of enhancing the detection signal and preventing of false alarm.

7. Claims 8-9 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalen et al. and Guthrie et al. in view of Chalmers et al. and further in view of Basson [US 5,001,460].

Regarding to claims 8-9 and 10-11: Dalen et al., Guthrie et al. and Chalmers et al. made of obvious in claims 6 and 7 above, they fail to specify that a radio wave receiver attached to the movement detection device, which begins operations when a field intensity of the received radio waves falls below a predetermined value, Basson teaches a system for protecting portable article comprises a receiver 102 which attached to the protective case's mechanism, that receives radio waves from the transmitter 1 positioned at a predetermined distance from the mechanism 6, wherein the mechanism automatically operate when field intensity of the received radio waves falls below a predetermined value (predetermined range) [as shown in Fig. 1-4, 10 and col. 3, lines 19-27, col. 5, lines 43-54]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to employ proximity monitoring system includes a

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transmitter and receiver as taught by Basson into the system combination above, in order to provide a better security and energy consumption.

8. Claims 12-13 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalen et al. in and Guthrie et al. in view of Chalmers et al., and further in view of Wilk [US 6,046,678].

Regarding to claims 12-13 and 14-15: Dalen et al. and the combination made obvious in claims 3, 5 and 6, 7 above, they fail to specify the temperature sensor that detects temperature of a detection subject; and an attachment tool that attaches the movement detection device and the temperature sensor to the detection subject. Wilk teaches a protective monitoring device comprises a temperature sensor 60 for monitoring the temperature of the protective object 12, and an attachment tool 16, that attaches the protective device 10, includes movement detection device 20 and temperature sensor 60 [as shown in Fig. 1-2, col. 5, lines 35-49 and col. 6, lines 55-60]. It would have been obvious of one having ordinary skill in the art at the time of the claimed invention, to employ the temperature sensor with movement detection device as taught by Wilk, into the combination above, in order to monitor the temperature and movement detection of protecting object, since many shipping packages not merely deal with impact and disorientation, sometimes subjected to other inordinately extreme conditions such as very low/high temperatures and shaking.

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Conclusion


9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lekholm [US 4,869,251], Shimada [US 3,631,271], D'Angelo et al. [US 6,265,974] and Wortham [US 5,999,091].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son M Tang whose telephone number is (571)272-2962. The examiner can normally be reached on 4/9 First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J Wu can be reached on (571)272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Son Tang


DANIEL WU
SUPERVISORY PATENT EXAMINER
01/10/05